C3 3 (amended). A method according to claim 1, wherein the catalyst is an enzyme selected from the group consisting of
porphobilinogen deaminase (PBGD)
ALA dehydratase,
Uroporphyrinogendecarboxylase,
Coproporphyrinogen oxidase,
Coproporphyrinogen oxidise,
Protoporphyrinogen oxidase,
Uroporphyrinogen III synthase,
Ferrochelatase, and
Uroporphyrinogen decarboxylase,
or an enzymatically equivalent fragment or analogue thereof.

4 (amended). A method according to claim 1, wherein the disease is AIP and the enzyme is PBGD or an enzymatically equivalent fragment or analogue thereof.

5 (amended). A method according claim 1, wherein the catalyst is a recombinant form of the enzyme belonging to the heme biosynthetic pathway or of the enzymatically equivalent fragment or analogue thereof.

C4 21 (amended). A method according to claim 51, wherein the catalyst is a small artificial enzyme or an organic catalyst which can polymerize porphobilinogen to hydroxymethylbilane.

C5 23 (amended). A method according to claim 22, wherein the catalyst is tagged with a ligand specifically recognized by a liver cell whereby the tagged molecule is internalized by the liver cell.

C6 ~~40 (amended)~~. The method according to claim 39 wherein the disease is Acute Intermittent Porphyria, (AIP).

C7 Please add the following new claims:

47 (new). The method of claim 1 in which the disease is a porphyria.

48 (new). The method of claim 1 in which the disease is AIP and the enzyme is PBGD or an enzymatically equivalent fragment